

Ray Morris

The Ancient Tabby Ruins of Fort Frederica National Monument

Palm trees, live oaks, and Spanish moss today shade the 260-year-old tabby foundations and ruins at Fort Frederica National Monument on St. Simons Island, Georgia. This site marked the southernmost permanent British town of Frederica and opposed the Spanish claim to the land from their citadel at St. Augustine, 120 miles to the south.

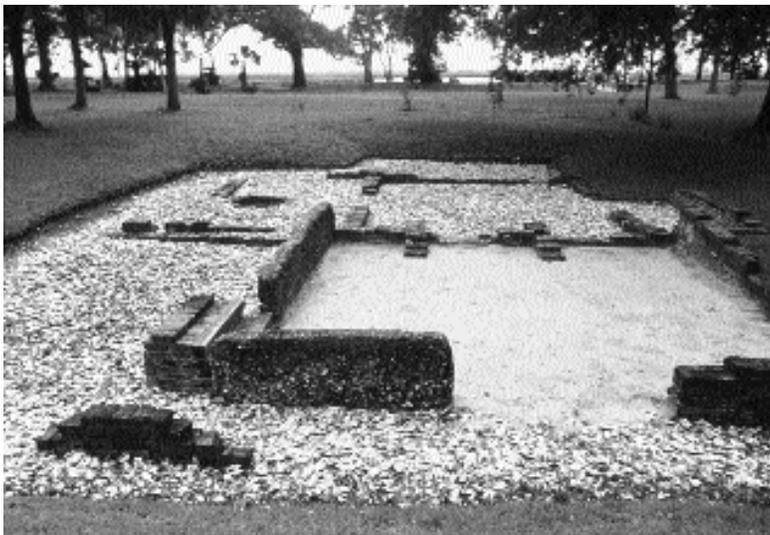
Frederica's place in history was that it served as a home for Georgia's regiment, the 42nd Regiment of Foot under the command of the Colony's founder James Edward Oglethorpe. From this strategic vantage Oglethorpe launched an unsuccessful siege of St. Augustine in 1740 and two years later repelled a Spanish armada and invasion force of over 2,000 soldiers and sailors. At Gully Hole Creek, a Spanish reconnoitering party reached within one mile of Frederica. Oglethorpe personally led this attack on horseback capturing one sergeant by his own hand and sending the Spanish troops fleeing. Later that day Scottish Highlanders aided by men from the 42nd Regiment repelled some of Spain's best soldiers, grenadiers from Havana at Bloody Marsh.

With the withdrawal and retreat of the Spanish force to St. Augustine the border question was settled, and with peace the town of around

1,000 people lost its military importance. The disbanding of the regiment in 1749 saw most of the townspeople leave with the soldiers. What was finally left of the town died with a great mysterious fire that burned many of the buildings to the ground in 1758. Frederica then became a ghost town with few buildings and activity on the ground until it was made a national monument in 1936 by an Act of Congress. This legislation set the town of Frederica aside for the great historical interest of the colonial period and specifically for its role as an important center of southern life in the early history of Georgia and its founder James Edward Oglethorpe. This site was also established to commemorate the repulse of the Spanish force sent to crush the settlement and colony in 1742. But Frederica's roots were set with tabby.

No one knows who was the first to blend equal parts of oyster shells, sand, lime, and water to make this crude 18th century form of concrete. Tabby was Frederica's answer to crude log and palmetto thatched huts that dotted the 35-acre hexagonal-shaped town site. A foundation study by the U.S. Army Corps of Engineers on Frederica's tabby found the use of beach sand, fine shell fragments, and calcium carbonate as the primary cementing mixture, with calcium oxide also detected. One theory regarding the derivation of the word Tabby was that it comes from the Spanish *tapia*, meaning a mud wall, or wall made with forms. Form boards were used in wall construction of many of the town walls of Frederica. These forms were held apart by wooden pins, set about one inch from the lower edge of the boards. These pins resembled an oversized nail. The head of the pin held the outside board fast, while a wooden peg was driven through the point of the pin holding the inner board. Small slats, or pieces of wood, dovetailed into the top of the boars, steadied the form. The hardening of the tabby mixture depended upon humidity, temperature, and consistency of the mixture, varying the time required before form removal variable. One source mentioned four hours as an average setup time for the colonial masonry mix. Then the forms were moved to another location or served to build the walls higher in size.

*Hawkins-Davison
House, courtesy
Fort Frederica
National
Monument.*





Francis Moore House, courtesy Fort Frederica National Monument.

Frederica was not simply a rude garrison town, it was a community of craftsmen, artisans, merchants, and professionals who were hand-picked in England to inhabit the colony. Frederica became an ideal test ground for hypotheses and concepts concerning the American colonial experience and the archeological processes that can reveal details of the past. Frederica is well suited to determine the nature of military-civilian interaction within the frontier town as well as pointing out the variety of socio-economic affiliations of the towns inhabitants.

Frederica's 84 lots contained many tabby houses and outbuildings as well as a history of historical archeology. During the past 52 years, over 45 archeological excavations have occurred at Fort Frederica National Monument. The late Charles H. Fairbanks of the University of Florida conducted the first excavations and mapped out the town. Frederica is an excellent scientific study due to a variety of reasons. It was important to the early colonial history in the southeast and it was a unique isolated site with little post colonial occupation. Most importantly, Frederica contained a cross section of cultural and economic structure of the early American colonies.

Today, Fort Frederica is a 238- acre preserve made up of an 8-acre tract commemorating the Bloody Marsh battle site and 230 acres of the town of Frederica, fort ruins, adjacent buffers, and marshlands across the Frederica River. Only two principal above-ground ruins, segments of the fort and the barracks tower, remain today to remind visitors of the early time of the town. The public interpretation program begins in the park visitor center where a movie, touch computers, exhibits and displays of archeological artifacts help establish life at Frederica in the 18th century. Tabby ruins, including the fort, town ruins, and foundations are the most appealing aspect of the site to visitors today. None of the town was reconstructed

Lauren B. Sickels Taves

Southern Coastal Lime Burning

General James Oglethorpe (1696-1785) was a soldier and a scholar with a determination to make his colony of Georgia work. Other colonies were founded on religious persecution or for the benefit of reaping the natural riches of the land, but the initial colonists sailing to Georgia were *selected*. Over 600 men were interviewed in England, but only 35 families were finally chosen.

In 1733, housing was initially comprised of wood or in the more rural settings, such as Fort Frederica on St. Simons Island, palm-thatched shelters. Some housing was quickly replaced by "substantial dwellings of brick or tabby; for among the settlers were bricklayers and masons."¹

The first bricks were sent over as ballast in ships, but by 1734, industrious Salzburgers had begun making bricks. John West of Savannah began his brick operation in 1736 and within the first eight months of 1738 had made more than two hundred thousand. Samuel Holmes, a brick-

layer and mason, arrived in 1737 and before one year had passed had already produced more than one hundred thousand.²

Despite the labors of these men, bricks were just not being made in the quantities needed according to colonist Henry Myers in May 1741. "As the bricks were dear and much labor for young beginners, we have fallen upon a much cheaper and better way of making houses, of a mixture of lime and oyster shells (of which we have vast quantities) framed in boxes, which soon dries and makes a beautiful, strong and lasting wall."³ Mr. Myers was writing of the fore-mentioned Southern coastal building material, 'tabby,' found between roughly Charleston, South Carolina and St. Augustine, Florida and popular from the 16th through 19th centuries.

Lime Sources

Be it brick or tabby, a necessary ingredient in the building process was lime. The procurement of lime for the early building of the Southern colonies appears to be one of the easier tasks for the settlers. The islands along the coast of South Carolina, Georgia, and Florida were originally occupied by Native Americans, who dined on the

Archeological education program at Fort Frederica. Photo courtesy Fort Frederica National Monument.

so visitors have the opportunity to use their imagination aided by outdoor exhibits containing reproductions of artifacts actually found at the site.

A major educational initiative is taking place at Fort Frederica with the local school district and supported by a major grants from the Fort Frederica Association and National Park Foundation. Children in 4th and 5th grades are learning about archeology through a multi-disciplinary program. After learning about the theory of archeology through 15 background lessons, students perform an actual on-site supervised field dig at Fort Frederica on a 30-year-old site of reburied artifacts. The children and teachers then return the artifacts to a full-scale archeological laboratory that was established in the nearby Oglethorpe Point Elementary School. There they clean, classify, weigh, and measure the artifacts as well as write a report on their findings and perform curatorial maintenance on selected pieces. Several identified



artifacts are selected, displayed, and interpreted in exhibit cases inside the school. The program will soon be available throughout the state and possibly around the country with the installation of a Georgia Statewide Academic and Medical Systems (GSAMS) interactive long distance learning center that will be permanently based at the school.

Frederica's tabby ruins stand today as a silent sentinel to the early period of America's colonial past. This primitive concrete mixture stands to remind visitors and park neighbors of the resourcefulness and adaptation that our original settlers devised to exist and thrive during the early days of the Southeastern Coast.

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plentiful clams and oysters abounding the shores. Typical of their habits, they concentrated their refuse in piles rather than scattering them.

These Indian middens were found by the English and Spanish. Historical references cite their size to be as large as several acres.⁴

The use of shells in making lime was nothing new to the white man, particularly the English. Historical references such as Pliny and Vitruvius were available to cite.⁵ On a more contemporary scale, architectural patternbooks and trade treatises had become the rage in Britain over the last century, with more being published each year. One work, *Mechanick Exercises*, by Joseph Moxon, published in 1703, expounded on the trades of smithing, joinery, carpentry, turning, and bricklaying. In his discussion on lime, he states: "But the shells of Fish, as of Cockles, Oysters, & c. are good to burn for Lime."⁶

Oglethorpe, being a scholar, was undoubtedly aware of these works, and apprenticed masons and bricklayers learned of these sources through handed-down knowledge as well. The Indian middens, therefore, must have been a pleasant sight as they readily solved the problem of lime. No search and digging needed to be undertaken to find a

proper clay or stone. The task at hand merely became how to convert these shells into lime.

Lime Kilns or Casts

Again, current knowledge had its precedent in earlier published books or handed-down knowledge. The Spanish missions in Georgia had already been making lime by building "casts, built of wood, probably cedar" when Oglethorpe arrived.⁷ For centuries these casts have been known as "intermittent kilns with mixed feed" where a layering effect of limestone or shell have been alternated with a fuel such as coal or wood. The two materials or "feed" form the kiln and burn together, basically leaving nothing but lime and ash. Early authors such as Pliny and Vitruvius expounded on the employment of "ash" in the setting of mortars; English colonists therefore would not care that wood ash mixed with shell lime during the firing process. "Intermittent" referred to the fact that each burn of a charge (e.g. oystershells) constituted a separate operation. The charge of shells were burned based on the demand of the neighborhood.

Primitive kilns were constructed of stone and located against the side of a hill for easy access to the top and bottom. One early kiln, excavated at